

IN THE SPECIFICATION

Please amend the paragraph at page 12, lines 12-15, as follows:

Fig. 16 and 17 illustrate ~~the first~~ another embodiment of the cleaning sheet according to the present invention. Fig. 17 shows the cleaning sheet attached to the head of a cleaning tool. In the figures, numerals ~~[[1]]~~ 1' and 2 indicate the cleaning sheet and the cleaning tool, respectively.

Please amend the paragraph at page 12, lines 16-20, as follows:

As shown in Fig. 16, the cleaning sheet ~~[[1]]~~ 1' has a rectangular shape in its plan view. The cleaning sheet ~~[[1]]~~ 1' has a wiping portion 1A and fixing portions 1B located on both sides of the wiping portion 1A. In the state attached to the head 20 of the cleaning tool 2 as illustrated in Fig. 17, the wiping portion 1A is disposed on the lower side of the head 20, and the fixing portions 1B are fixed to the upper side of the head 20.

Please amend the paragraph at page 12, lines 21-25, as follows:

While the cleaning sheet ~~[[1]]~~ 1' is not particularly limited in size and shape, it is preferred that both length L and width W' fall within $\pm 30\%$ of the length and the width, respectively, of the lower side of the head 20 of the cleaning tool ~~[[1]]~~ 2. As the area of the head 20 of the cleaning tool 2 increases, the wiping portion 1A of the cleaning sheet ~~[[1]]~~ 1' should have an accordingly increased area.

Please amend the paragraph at page 12, line 29 to page 13, line 4, as follows:

The wiping portion 1A, in the state attached to the head 20, consists of a flat part ~~[[10]]~~ 110 and tacky sloped parts ~~[[11]]~~ 111 rising from the flat part ~~[[10]]~~ 110. Both the flat part ~~[[10]]~~ 110 and the sloped parts ~~[[11]]~~ 111 are disposed substantially along the lower side

21 of the head 20. The angle θ (see Fig. 17) of each sloped part 111 is preferably 1° to 60° , more preferably 3° to 45° , in view of the size of dust to be trapped and wiping operability.

Please amend the paragraph at page 13, lines 5-8, as follows:

The area of the flat part 110 is preferably 30% to 95%, more preferably 50% to 90%, even more preferably 60% to 80%, of the area of the wiping portion 1A, considering the balance between the capability of trapping hair, soil dust, etc. and the capability of trapping relatively large dust particles.

Please amend the paragraph at page 13, lines 9-15, as follows:

In the present embodiment, the wiping portion 1A has the sloped parts 111 along all its periphery and obliquely across the flat part 110. The sloped parts 111 along the periphery of the wiping portion 1A trap relatively large dust particles as well as hair, soil dust, etc. with their tackiness as the head of the cleaning tool 2 is slid in a usual wiping operation. The cleaning sheet traps dust on not only the peripheral sloped parts but the sloped parts 111 obliquely across the flat part 110, thereby having an increased dust collecting capacity.

Please amend the paragraph at page 13, lines 16-18, as follows:

The sloped parts 111 have tackiness (tack). A pressure-sensitive adhesive described infra is applied either all over the surface of the sloped parts 111 or in various patterns (e.g., in dots).

Please amend the paragraph at page 13, lines 19-25, as follows:

The tack of the sloped parts ~~[[11]]~~ 111 is preferably 1 to 30, more preferably 3 to 28, even more preferably 5 to 25, as expressed in terms of ball number (i.e., the nominal diameter of a ball multiplied by 32) in the rolling ball tack test specified in JIS Z0237 14 (test methods of pressure-sensitive adhesive tapes and sheets). Too low tack results in a failure to trap the dust that has not been trapped by the cleaning portion. If the tack is too high, the sloped part can strongly stick to the surface to be cleaned and hardly separate, which impairs the operability.

Please amend the paragraph at page 13, line 26 to page 14, line 2, as follows:

The pressure-sensitive adhesives which impart tack to the sloped parts ~~[[11]]~~ 111 include those of natural rubber type, styrene-butadiene latex type, styrene type, acrylic type or silicone type, thermoplastic rubbers, ABA block copolymers, butyl rubber, polyisobutylene, and vinyl ether polymers. Preferred of them are styrene type or acrylic type pressure-sensitive adhesives for their processability, storage stability, tack duration, and the properties of not transferring when touched.

Please amend the paragraph at page 14, lines 3-4, as follows:

As shown in Fig. 17, the cleaning sheet ~~[[1]]~~ 1' is formed of a base sheet ~~[[12]]~~ 112 and a bulky member ~~[[13]]~~ 113 fixedly adhered to the base sheet ~~[[12]]~~ 112.

Please amend the paragraph at page 14, lines 5-11, as follows:

The base sheet ~~[[12]]~~ 112 can be of any material that has been used in a cleaning sheet capable of trapping dust by entanglement in, or adsorption to, the fibers. Examples of the base sheet ~~[[12]]~~ 112 include paper, nonwoven fabric, film, pile fabric, and the cleaning sheet

disclosed in JP-A-7-184815, para. [0008]-[0018]. Also included is a sheet treated with a liquid containing one or more of oils (such as mineral oils, synthetic oils, and silicone oils) and surface active agents so as to exhibit dust adsorption attributed to the liquid.

Please amend the paragraph at page 14, lines 12-15, as follows:

The base sheet 112 preferably has a basis weight of 5 to 100 g/m² for operability, processability, stiffness, and flexibility. The base sheet 112 preferably has a thickness of 0.005 to 3 mm for operability, processability, stiffness, and flexibility.

Please amend the paragraph at page 14, lines 16-19, as follows:

The bulky member 113 has a trapezoidal cross section composed of a flat part and sloped parts corresponding to the aforementioned flat part 110 and sloped parts 111. The base sheet 112 is fixed along the faces of these parts to provide the flat part 110 and the sloped parts 111.

Please amend the paragraph at page 14, lines 20-24, as follows:

The bulky member 113 is preferably of a material that has desired bulk, provides sloping faces corresponding to the sloped parts 111, and allows for fixing the base sheet 112 on itself. Such a material includes pulp, nonwoven fabric, paper, film, pile fabrics, sponge, expanded styrene, and rubber sheets. Two or more materials properly selected therefrom may be stacked to make the bulky member 113.

Please amend the paragraph at page 14, line 25 to page 15, line 1, as follows:

The thickness T of the bulky member 113 is decided appropriately according to the size of dust and debris to be caught up. It is preferably 0.5 mm or greater for catching

sand or like dust of 0.5 to 1 mm in diameter, or 3 mm or greater for trapping rice grains or like particles of 3 to 5 mm in diameter.

Please amend the paragraph at page 15, lines 2-8, as follows:

With the head 20 of the cleaning tool 2 applied to a surface to be cleaned (e.g., a floor) and moved to and fro to carry out usual sweeping operation, the cleaning sheet [[1]] 1' of the present embodiment entraps relatively large solid dust particles on the sticky surface of the sloped parts [[11]] 111 and catches fine dust (e.g., house dust), hair, etc. on the surface of the flat part [[10]] 110 of the wiping portion 1A. Having sloped parts [[11]] 111 obliquely across the flat part [[10]] 110, the cleaning sheet [[1]] 1' has an increased capacity of collecting relatively large solid dust particles.

Please amend the paragraph at page 15, lines 14-21, as follows:

The cleaning sheet 1' of the second embodiment shown in Fig. 18 is formed of a single member, a sheet [[12]] 112. The sheet [[12]] 112 has a thick bulky wiping portion 1A and thin fixing portions 1B. The wiping portion 1A has a sloped part [[11]] 111 along its front and rear edges and sloped parts [[11]] 111 obliquely across the flat part [[10]] 110. These sloped parts [[11]] 111 are provided with tackiness. The sloped parts [[11]] 111 can be formed by, for example, embossing the sheet [[12]] 112 or producing the sheet [[12]] 112 by molding process, air-laying process or patternwise fiber accumulation. The sheet [[12]] 112 can be of the same material as the material of the base sheet [[12]] 112 of the first embodiment.

Please amend the paragraph at page 16, lines 11-16, as follows:

The cleaning sheet of the present invention preferably has a laminate structure in which the wiping sheet [[12]] 112 is fixed on the base sheet [[11]] 111 as in the first embodiment. Otherwise a single sheet may be shaped to have desired recesses by embossing, changing the basis weight of prescribed parts, accumulating fibers on prescribed parts, or heat sealing, and tackiness is imparted to the recesses thus formed as described earlier.

Please amend the paragraph at page 16, lines 17-19, as follows:

While it is preferred for each recess 10 (or 110) to exhibit tack on both the inner wall 10c and the flat bottom 10d as in the foregoing embodiments, tackiness may be imparted to either one of the inner wall 10 (or 110) and the flat bottom 10d.

Please amend the paragraph at page 16, lines 20-22, as follows:

While it is preferred that the recesses [[10]] 110 be formed in one (see Fig. 14) or both of the front and the rear edges as in the foregoing embodiments, they may be formed on either one or both of the left and the right edges (longitudinal ends).

Please amend the paragraph at page 17, lines 4-6, as follows:

For example, while in the foregoing embodiments the fixing portions 1B are formed of the base sheet [[11]] 111 per se, tackiness may be imparted to the surface of the base sheet whereby the base sheet may be removably attached to the head of a cleaning tool.

Please amend the paragraph at page 17, lines 7-14, as follows:

In another embodiment, the base sheet [[11]] 111 is shaped to provide a plurality of tags 11a sticking out of the front and the rear edges and serving as fixing portions 1B as in

the cleaning sheet 1' illustrated in Fig. 19 (in the particular case of Fig. 19, two tags 11a for each of the front and the rear edges). The tags 11a are attached to the head to fix the cleaning sheet. The cleaning sheet 1' of this embodiment has the following advantages. When the wiping sheet 112 is longer than the head of a cleaning tool, waste of the base sheet can be avoided. The fixing portions are prevented from sticking to the recesses 110.

Please amend the paragraph at page 17, lines 23-27, as follows:

While the cleaning sheets of the foregoing embodiments are single-sided, the cleaning sheet may be made double-sided reversible as in the embodiment illustrated in Fig. 20. The cleaning sheet 1' of this embodiment is formed of a single base sheet 112 with its wiping portion 1A being made thick to bulge both upward and downward so that the cleaning sheet can be reversed after one side is soiled.

Please amend the paragraph at page 18, lines 3-11, as follows:

The sloped (or curved) part 111 in the flat part 110 of the wiping portion 1A is preferably configured to divide the flat part 110 as in the first embodiment. It is also possible that sloped parts 111 starting from the front and the rear edges of the flat part 110 extend inward by a prescribed length but not to divide the flat part 110 as in the cleaning sheet 1' of the embodiment illustrated in Fig. 21. This embodiment allows for increasing the sloped area without largely reducing the flat area. As a result, the cleaning sheet exhibits improved balance between the performance of trapping hair and soil dust and the performance of trapping relatively large solid dust particles and surely catches up dust irrespective of the wiping direction.

Please amend the paragraph at page 18, lines 12-20, as follows:

The cleaning sheet of the present invention preferably has the sloped part [[11]] 111 rising from the flat part [[10]] 110 along each of the front and the rear edges of the wiping portion 1A. The sloped part [[11]] 111 may be replaced with an inwardly curved part [[11']] 111' rising from the flat part [[10]] 110 as in the cleaning sheet 1' of the embodiment shown in Fig. 23. The cleaning sheet 1' of this embodiment surely catches up dust irrespective of the wiping direction. The wiping portion 1A has an increased area of the tacky surface (curved parts [[11']] 111') while the front and the rear edges of the flat part [[10]] 110 adjacent to both ends of the curved parts [[11']] 111' secure stability of the wiping operation. Two or more curved parts [[11']] 111' may be provided along one edge of the wiping portion 1A.

Please amend the paragraph at page 19, lines 3-9, as follows:

As in the cleaning sheet 1' of the embodiment shown in Fig. 25, the wiping portion may have the sloped or curved part (the sloped part in Fig. 25) along a position inward from the front and the rear edges of the head 20. According to this embodiment, relatively large dust particles once trapped onto the sloped part [[11]] 111 are prevented from sticking out of the lower side 21 of the head and thereby prevented from pressing or rubbing an object to be cleaned, which can damage the object or allow the dust to come off the trap.

Please amend the paragraph at page 19, lines 13-15, as follows:

For example, while in the foregoing embodiments the fixing portions 1B are formed of the base sheet [[12]] 112 per se, tackiness may be imparted to the surface of the base sheet so that the base sheet may be removably attached to the head of a cleaning tool.

Please amend the paragraph at page 19, lines 16-21, as follows:

In another embodiment, the base sheet [[12]] 112 is shaped to provide a plurality of tags [[12a]] 112a sticking out of the front and the rear edges to serve as fixing portions 1B as in the cleaning sheet 1' illustrated in Fig. 26 (in the particular case of Fig. 26, two tags [[12a]] 112a for each of the front and the rear edges). The tags [[12a]] 112a are attached to the head to fix the cleaning sheet 1'. According to this embodiment, the base sheet [[12]] 112 can be reduced in area to cut down the material cost.